

## REMARKS

The present application included pending claims 14-20, and 26-37. Claims 14-20 were previously allowed. *See, e.g.*, December 7, 2005 Office Action. Claims 1-13, and 21-25 were previously canceled without prejudice or disclaimer. *See* February 14, 2006 Amendment. By this Amendment, claim 14 has been amended as set forth above, while claims 15-20, and 26-37 have been canceled without prejudice or disclaimer. New claims 38-62 have been added. The Applicants respectfully submit that claims 14, and 38-62 define patentable subject matter.

Claim 14 stands rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,825,894 (“Shennib”) in view of United States Patent No. 6,067,360 (“Kasai”). The Applicants respectfully traverse this rejection at least for the reasons discussed previously during prosecution, and the following:

### **I. The Proposed Combination Of Shennib And Kasai Does Not Render Claim 14 Unpatentable**

In order for a *prima facie* case of obviousness to be established, the Manual of Patent Examining Procedure (MPEP) states the following:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must **both be found in the prior art, and not based on applicant’s disclosure.**

*See* Manual of Patent Examining Procedure (MPEP) at § 2142, citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

The law is well settled that “obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion or incentive to do so.” *ACS Hospital Systems, Inc. v. Montfiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929 (Fed. Cir. 1984). It is not permissible to pick and choose among the individual elements of assorted prior art references to re-create the claimed invention, but rather “some teaching or suggestion in the references to support their use in the particular claimed combination” is needed. *Symbol Technologies, Inc. v. Opticon, Inc.* 935 F.2d 1569, 1576, 19 USPQ2d 1241 (Fed. Cir. 1991).

Additionally, if a *prima facie* case of obviousness is not established, an applicant is under no obligation to submit evidence of nonobviousness.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See Manual of Patent Examining Procedure MPEP at § 2142.

**A. The Proposed Combination Does Not Teach Or Suggest A Loudspeaker At An Overhead Position Directly Above The Test Subject**

Shennib discloses a system in which “[t]hree of the speakers, i.e., #1 (89), #5 (93), and #6 (94) are located in the sagittal plane 96 containing the head reference point 88. Speakers #1, #5, and #6 are positioned at altitude angles  $0^{\circ}$ ,  $45^{\circ}$ , and  $-45^{\circ}$ , respectively, as shown in FIG. 7 at B.” Shennib at column 15, lines 7-11. As shown in Figure 7 of Shennib, the speaker 93 is located in front of, and above, the head reference point 88. Because the speaker 93 is in front of the head reference point 88, it is not directly overhead the test subject. Speaker 93 is not “located at an **overhead center position**

**directly** above the test subject in the listening position.” Further, Kasai also does not teach or suggest a speaker located at such a position. Thus, the Applicants respectfully submit that the combination of Shennib and Kasai does not render claim 14 unpatentable at least for this reason.

**B. A Conclusory Statement Regarding Design Choice Is Not Sufficient To Establish A Prima Facie Case of Obviousness**

The Office Action concedes that the proposed combination does not teach the limitation noted above, but summarily concludes that such a speaker location is merely a matter of design choice. *See* March 28, 2006 Office Action at page 4 (“Although not directly above the test subject it would be a matter of design choice to place the speaker directly above the subject since claim 14 only claims speaker locations.”).

The Office Action does not point to anything in either reference that teaches, or remotely suggests, “a second further loudspeaker located **at an overhead center position directly above the test subject in the listening position,**” as recited in claim 14 of the present application. The proposed combination of Shennib and Kasai simply does not teach or suggest such a limitation.

The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. **The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant’s specification, to make the necessary changes in the reference device.**

*Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984) (emphasis added). The Office Action does not point to a “motivation or reason” in the prior art to change Shennib as indicated above. Instead, the Office Action merely

concludes that “such a location is merely a matter of design choice,” without specifying any motivation in the prior art to change the specific arrangement shown in Shennib.

As noted above, “the teaching or suggestion to make the claimed combination and the reasonable expectation of success must **both be found in the prior art, and not based on applicant’s disclosure.**” See MPEP at § 2142 (emphasis added). Though there is absolutely nothing in Shennib or Kasai that would motivate one having ordinary skill in the art to provide “a second further loudspeaker located **at an overhead center position directly above the test subject in the listening position,**” as recited in claim 14 of the present application, the Office Action nonetheless concludes that “[I]t would be a matter of design choice to place the speaker directly above the subject....” See March 28, 2006 Office Action at page 4. But there is nothing in either reference that would suggest such an addition to either reference. Though the Office Action **speculates** that such an arrangement is a “matter of design choice,” neither reference identifies this arrangement. As noted above, the “mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims... is not by itself sufficient to support a finding of obviousness.” *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ at 353.

The speculation within the Office Action regarding “design choice” is, moreover, no substitute for a suggestion that simply is not present in the cited references. See *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002). Thus, at least for these reasons, the Applicants respectfully submit that the proposed combination of Shennib and Kasai does not render claim 14 unpatentable.

**C. The Office Action Does Not Point To A Motivation Or Suggestion To Combine The References That Is Found In The Prior Art**

The Office Action, as shown below, merely cites isolated elements from Kasai to overcome additional deficiencies of Shennib:

Shennib does not disclose the at least one audio source transmitting a time-offset or delayed sum of the at least a portion of the plurality of audio signals and the further audio signals to the second further loudspeaker. Kasai discloses a method for processing audio signals to produce a surround-effect (i.e. real listening environment in a three dimensional space) (Column 2 lines 26-31). Kasai discloses processing comprising of delay processors (Figure 5, references 14L, 14R, and 30) and summers (44, 46, 16, 18, and 54) to provide the surround sound effect of Figure 4. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include processing to delay and sum signals in order to provide a three-dimensional sound space as required by Shennib.

See March 28, 2006 Office Action at page 4. Notably, the Office Action assumes that a motivation to combine the references exists merely because Kasai allegedly discloses limitations not found in Shennib. Merely identifying isolated elements in the prior art, however, is not enough to establish a *prima facie* case of obviousness:

[M]ere identification in the prior art of each element is insufficient to defeat the patentability of the combined subject matter as a whole. [*In re Rouffet*, 149 F. 3d 1350] at 1355, 1357 [(Fed. Cir. 1998)]. Rather, to establish a *prima facie* case of obviousness based on a combination of elements disclosed in the prior art, the Board must articulate the basis on which it concludes that it would have been obvious to make the claimed invention. *Id.* In practice, this **requires** that the Board “explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.” *Id.* at 1357-59. This entails consideration of both the “scope and content of the prior

art” and “level of ordinary skill in the pertinent art” aspects of the Graham test.

**When the Board does not explain the motivation, or the suggestion or teaching, that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, we infer that the Board used hindsight to conclude that the invention was obvious.**  
*Id.* at 1358.

*See in re Kahn*, 441 F.3d 977 (Fed. Cir. March 22, 2006) (emphasis added). As shown above, the Office Action merely cites isolated elements from Kasai to fill in the gaps of Shennib. However, the Office Action does not explain the motivation, suggestion, or teaching to combine these references. Merely identifying isolated elements is not enough to establish a *prima facie* case of obviousness. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements.” *See id.* (emphasis added). Thus, at least for this reason, the Applicants respectfully submit that the proposed combination of Shennib and Kasai does not render claim 14 unpatentable.

**D. No Motivation Or Suggestion To Combine Shennib With Kasai**

Additionally, the Applicants maintain that one having ordinary skill in the art would not be motivated to combine Shennib and Kasai to produce a “multi channel sound reproduction system for testing hearing and hearing aids,” as recited in the claims of the present application. Shennib “relates to hearing evaluation and hearing aid fitting.” Shennib at column 1, lines 10-13. On the other hand, Kasai relates to “an apparatus and method for localizing a sound image, more specifically the simplification of its structure and processes.” Kasai at column 1, lines 15-17. In particular, Kasai relates to “surround sound” systems.

The Applicants respectfully submit that these are nonanalogous areas of art and

one having ordinary skill in the art would not be motivated to combine them. As set forth in the background section of the present application at pages 6-7:

It may be suggested that a system similar to entertainment **"surround sound" systems** may be used to address many of the above-mentioned problems. However, **such entertainment systems are not suited for use in hearing and hearing aid assessment for many reasons.** For example, in entertainment audio systems, the loudspeakers are located substantially distant from the listener, at or near the perimeter of a listening area that is accessible to multiple listeners. As with previous multiple-loudspeaker systems used in hearing and hearing-aid assessment, signals received by listeners from such entertainment audio systems contain a substantial contribution of the acoustical qualities of the listening environment. In any system that delivers signals containing the acoustical qualities of the listening environment as such, a given recording sounds somewhat different in different listening environments and has different acoustical qualities in each listening environment. Such systems, therefore, do not enable the desired standardization for hearing and hearing aid assessment.

In addition, **entertainment audio systems are designed so that background noises presented to the listener enhance or support the reception of an entertainment event, such as a primary audio signal or a visual picture.** In the real world, however, background noises presented to the listener do not enhance or support the reception of a primary audio signal or a visual picture. Instead, background noises disrupt or compete with the reception of such primary stimuli, resulting in conditions under which the reception of such primary stimuli breaks down. It is these real-world conditions that are desirable for hearing and hearing aid assessment.

Thus, the Applicants respectfully submit that one would not be motivated to combine the entertainment audio system of Kasai with the system of Shennib to produce the system for testing hearing and hearing aids as recited by claim 14 of the present application. At least for this reason, the Applicants respectfully submit that claim 14 should be in

condition for allowance.

## II. Conclusion

The Applicants respectfully submit that claims 14, and 38-65 of the present application should be in condition for allowance at least for the reasons discussed above and/or previously during prosecution. If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited to contact the Applicants.

## III. Fees

The present application now includes claim 14, and 38-62. Thus, the present application now includes twenty-six (26) claims, five (5) of which are independent claims. The fee for these new claims is calculated below:

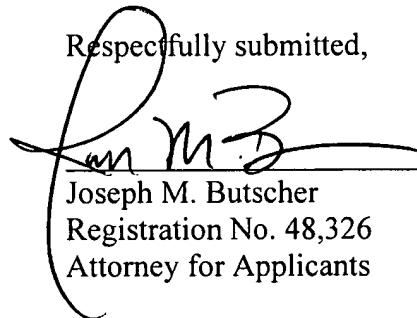
Six (6) claims in excess of twenty (20) X \$25 for small entity .....	\$150
Two (2) independent claims in excess of three (3) X \$100 .....	\$200
<b>TOTAL .....</b>	<b>\$350</b>

The Commissioner is authorized to charge the \$350 fee calculated above, and any other necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Date: May 30, 2006

MCANDREWS, HELD & MALLOY, LTD.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661  
Telephone: (312) 775-8000  
Facsimile: (312) 775-8100

Respectfully submitted,



Joseph M. Butscher  
Registration No. 48,326  
Attorney for Applicants